

CLAIMS

1. A double-skin tubular structural member including:
 - a fibre reinforced polymer outer tube;
 - 5 - an inner tube made from generally metallic materials; and
 - filler material provided between said outer tube and said inner tube.
2. A double-skin tubular structural member as claimed in claim 1 wherein said
filler material comprises a bound aggregate material.
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3. A double-skin tubular structural member as claimed in claim 2 wherein said
bound aggregate material comprises concrete.
4. A double-skin tubular structural member as claimed in claim 1 wherein said
15 inner tube comprises a steel tube.
5. A double-skin tubular structural member as claimed in claim 1 wherein said
fibre-reinforced polymer includes at least some fibres orientated generally
circumferentially around said tube.
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6. A double-skin tubular structural member as claimed in claim 5 wherein said
fibre-reinforced polymer includes a majority of fibres being orientated
generally circumferentially about said tube.

7. A double-skin tubular structural member as claimed in claim 1 wherein said outer fibre-reinforced polymer tube is constructed from a plurality of layers of fibre-reinforced polymer.
- 5 8. A double-skin tubular structural member as claimed in claim 1 wherein said outer fibre-reinforced polymer tube is constructed using a filament winding process.
9. A method of constructing a double-skin tubular structural member comprising the steps of:
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- providing a pre-formed fibre reinforced polymer outer tube;
 - providing an inner tube made from generally metallic materials; and
 - inserting a filler material between said outer tube and said inner tube.
- 15 10. A method of constructing a double-skin tubular structural member as claimed in claim 9 wherein said method further includes inserting a bound aggregate as the filler material.
11. A method of constructing a double-skin tubular structural member as claimed
- 20 in claim 9 wherein said fibre reinforced polymer outer tube acts as a construction form during a curing stage of the filler material.